PLANT 1

ATTACHMENT A

AGRIUM KNO FACILITY

CONTINUOUS RELEASE-EMERGENCY RESPONSE NOTIFICATION SYSTEM REPORT

Agrium Attachment To LOT — ENV-07702
Kenai Nitrogen Operations

SECTION I: GENERAL INFORMATION	CR-ERNS Number: 44607
Date of Initial Release:	Date of Initial Call to NRC: 10/23/90

Type of Report: Indicate below the type of report you are submitting.

[ ] Initial Written Notification	[ ] First Anniversary Follow-up Report	[X] Written Notification of a Change to Initial Notification	[ ] Written Notification of a Change to Follow-up Report

Signed Statement: I certify that the hazardous substances releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate and current to the best of my knowledge.

M. L. Nugent, Plant Manager
Name and Position

8/13/99
Date

M L Nugent
Signature

Part A. Facility or Vessel Information

Name of Facility or Vessel

Alaska Nitrogen Products LLC
Kenai Plant

Person in Charge of Facility or Vessel

Name of Person in Charge M. L. Nugent
Position Plant Manager
Telephone No. (907) 776-8121 Alternate Telephone No. ( ) None

Facility Address or Vessel Port of Registration

Street Mile 21 Spur Highway County Kenai Peninsula Borough
City Kenai State AK Zip Code 99611

Dun and Bradstreet Number for Facility 092876390

Facility/Vessel Location

Latitude Deg N 60 Min 40 Sec 22
Longitude Deg W 151 Min 22 Sec 36

Vessel LORAN Coordinates

Part B. Population Information

Population Density

Choose the range that describes the population density within a one-mile radius of your facility or vessel (Indicate by placing an "X" in the appropriate blank below.)

X 0 - 50 persons
____ 51 - 100 persons
____ 101 - 500 persons
____ 501 - 1000 persons
____ more than 1000 persons

Sensitive Populations and Ecosystems Within one Mile Radius

Sensitive Populations or Ecosystems (e.g., schools, hospitals, wetlands, wildlife preserves, etc.)	Distance and direction from facility
NONE	

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Plant #1, CO2 Vent, D-107

1. Indicate whether the release from this source is either:

continuous without interruption _____ **OR** routine, anticipated, intermittent __X__

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

Ammonia production

3. Identify below how you established the pattern of release and calculated release estimates.

__X__ Past release data	_____ Knowledge of the facility/vessel's operations and release history	__X__ Engineering estimate
_____ AP-42 test	_____ Best professional judgment	_____ Other (explain)

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Plant #1 CO2 Vent, D-107

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack__X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack**, indicate stack height: ____85____ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** _____ (stream _____, lake _____, or other _____)

- If the release affects any **surface water body,** give the name of the water body.

  _____

- If the release affects a **stream,** give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: ____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:
  - Inside diameter 2.5 feet ~~or meters~~
  - Gas Exit Velocity 38 feet/second or ~~meters/seconds~~
  - Gas Temperature 105 degrees Fahrenheit, ~~Kelvin, or Celsius~~

- For a release to surface water, provide the following information, if available:
  - Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number
	44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Plant #1, CO2 Vent, D-107

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	48	8	365	7300	All

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* *Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.*

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Plant #1, Dearator, F-105

1. Indicate whether the release from this source is either:

   continuous without interruption ___X___ **OR** routine, anticipated, intermittent _____

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

   Ammonia production

3. Identify below how you established the pattern of release and calculated release estimates.

__X__ Past release data	_____ Knowledge of the facility/vessel's operations and release history	__X__ Engineering estimate
_____ AP-42 test	_____ Best professional judgment	_____ Other (explain)

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Plant #1 Dearator, F-105

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack__X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack**, indicate stack height: ____70____ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** ____ (stream ____, lake ____, or other _____)

- If the release affects any **surface water body**, give the name of the water body.

  _____

- If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: ____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:

  Inside diameter __0.5__ feet ~~or meters~~

  Gas Exit Velocity __Unknown__ feet/second or ~~meters/seconds~~

  Gas Temperature __212__ degrees Fahrenheit, ~~Kelvin, or Celsius~~

- For a release to surface water, provide the following information, if available:

  Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number
	44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Plant #1, Dearator, F-105

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	22	22	365	8,030	All

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* *Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.*

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Plant #1, Fat Flasher Vent, F-113

1. Indicate whether the release from this source is either:

   continuous without interruption ___X___ **OR** routine, anticipated, intermittent _____

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

   Ammonia production

3. Identify below how you established the pattern of release and calculated release estimates.

__X__ Past release data	_____ Knowledge of the facility/vessel's operations and release history	__X__ Engineering estimate
_____ AP-42 test	_____ Best professional judgment	_____ Other (explain)

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Plant #1 Fat Flasher Vent, F-113

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack __X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack**, indicate stack height: ____36____ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** _____ (stream _____, lake _____, or other _____)

- If the release affects any **surface water body,** give the name of the water body.

  _____

- If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: ____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:

  Inside diameter __1.8__ feet ~~or meters~~

  Gas Exit Velocity __Unknown__ feet/second or ~~meters/seconds~~

  ~~Gas Temperature~~ __105__ ~~degrees Fahrenheit, Kelvin, or Celsius~~

- For a release to surface water, provide the following information, if available:

  Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number
	44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Plant #1, Fat Flasher Vent, F-113

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	6	6	365	2,190	All

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* ***Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.***

SECTION II: SOURCE INFORMATION	CR-ERNS Number
	44607

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.
For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Plant #1, Wet Reformed Gas Vent, F-130

1. Indicate whether the release from this source is either:

   continuous without interruption _____ **OR** routine, anticipated, intermittent ___X___

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

   Start-up of ammonia plant.

3. Identify below how you established the pattern of release and calculated release estimates.

_____ Past release data	_____ Knowledge of the facility/vessel's operations and release history	___X___ Engineering estimate
_____ AP-42 test	_____ Best professional judgment	_____ Other (explain)

** Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.*

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number 44607

Name of Source: Plant #1 Wet Reformed Gas Vent, F-130

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

○ **AIR** __X__ (stack __X__ or area ____) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

- If identified source is a **stack,** indicate stack height: ____100____ feet ~~or meters~~; **OR**
- If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: ___ square feet or square meters.

○ **SURFACE WATER** ____ (stream ____, lake ____, or other _____)

- If the release affects any **surface water body**, give the name of the water body.

  _____

- If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.

  stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

- If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

  surface area of lake: _____ acres and average depth of lake: ____ meters.

○ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

_____

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

- For a stack release to air, provide the following information, if available:

  Inside diameter __1__ feet ~~or meters~~

  Gas Exit Velocity __Unknown__ feet/second or ~~meters/seconds~~

  Gas Temperature __400__ degrees Fahrenheit, ~~Kelvin, or Celsius~~

- For a release to surface water, provide the following information, if available:

  Average Velocity _____ feet/second of Surface Water

SECTION II: SOURCE INFORMATION (continued)	CR-ERNS Number
	44607

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Plant #1 Wet Reformed Gas Vent, F-130

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)* Upper Bound	Normal Range (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity Released in Previous Year (in lbs. ~~or kg~~)*	Months of the Release
Ammonia	7664-41-7	6,200	0	Approx. 2	2,190	Occurs whenever there is a plant startup. Does not correspond to particular month.

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances – A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)* Upper Bound	Normal Range of Components (in lbs. or kg per day)* Lower Bound	Normal Range of Mixture (in lbs. or kg per day)* Upper Bound	Normal Range of Mixture (in lbs. or kg per day)* Lower Bound	Number of Releases (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
N/A										

* ***Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (CI) are appropriate.***